

Knowledge, Attitude, and Practice of the Use of Irradiation Among Respondents to the FoodNet Population Survey in Connecticut and New York

S. Malone¹, R. Marcus¹, J. L. Hadler², S. M. Zansky³, D. Hoefler³, P. D. Frenzen⁴, A. Banerjee⁵, F. J. Angulo⁵, .. and the EIP FoodNet Working Group⁵;

¹Connecticut Emerging Infections Program, New Haven, CT, ²Connecticut Department of Public Health, Hartford, CT, ³New York State Department of Health, Albany, NY,

⁴United States Department of Agriculture, Economic Research Service, Washington, DC,

⁵Centers for Disease Control and Prevention, Atlanta, GA.

Background Irradiated beef products were first introduced in U.S. grocery stores in 2000, shortly after Federal approval for irradiation of raw meat to control foodborne pathogens. However, only a small proportion of grocery stores currently carry irradiated beef, due in part to uncertainty about consumer acceptance. Consumer knowledge, practice and attitudes regarding irradiated products are not well understood.

Methods The Foodborne Diseases Active Surveillance Network (FoodNet) conducts 12-month telephone-based population surveys in FoodNet sites. Using random digit dialing, one respondent per household is selected and interviewed using a standardized questionnaire. In the 2002 survey, respondents from New York and Connecticut were asked specific questions on knowledge, practice and attitude toward irradiated beef. For purposes of this analysis, only respondents ≥ 18 years from NY and CT were included.

Results Of 3104 respondents, 93% agreed that bacteria on raw meat can contaminate other food and 54% agreed that irradiation killed harmful bacteria. Responding to the statement that one could get irradiation exposure from eating irradiated food, 17% agreed, 38% disagreed, and 45% stated that they did not know. Knowledge of irradiated products varied on whether respondents lived in a county with a grocery store of Supermarket chain A, which has been actively promoting irradiated beef and educating consumers. In counties without this chain, 31% of respondents knew they could buy irradiated beef, with 5% of those actually looking for the products. An estimated 50% of respondents in counties with chain A knew that irradiated ground beef was available, and 13% looked for it.

Conclusions Irradiated beef has been on the market for four years, and while the majority of survey respondents knew the benefits of irradiation, most did not know if the products were available and were unsure of product safety. However, in areas where Supermarket chain A had promoted irradiated beef, more respondents were aware of and had looked for these products. This finding suggests that supermarket promotion campaigns may significantly affect people's perceptions and behavior toward irradiated products.